data optically with lasers. Combinations of the above should also be included within the scope of computer-readable media.

The previous description of the disclosure is provided to enable any person skilled in the art to make or use the disclosure. Various modifications to the disclosure will be readily apparent to those skilled in the art, and the generic principles defined herein may be applied to other variations without departing from the scope of the disclosure. Thus, the disclosure is not intended to be limited to the examples and designs described herein but is to be accorded the widest scope consistent with the principles and novel features disclosed herein.

What is claimed is:

1. An apparatus comprising:

at least one field gate located between an active gate and a drain,

at least one shallow trench isolation (STI) strip formed transverse to the at least one field gate and extending across the at least one field gate and to the drain, and

at least one drain active strip formed parallel to, and alternating with, the at least one STI strip.

2. The apparatus of claim **1**, wherein the at least one field gate comprises a single field gate.

3. The apparatus of claim **1**, wherein each of the at least one field gate has a length equal to or greater than a length of the active gate.

4. The apparatus of claim **1**, wherein each of the at least one field gate is located less than or equal to twice a minimum poly spacing from the active gate or another field gate of the at least one field gate.

5. The apparatus of claim **1**, wherein the at least one drain active strip is formed within a drain active region between the active gate and the drain.

6. The apparatus of claim **1**, wherein the at least one STI strip runs between the drain and the active gate.

7. The apparatus of claim **1** comprising a semiconductor device comprising:

a P-type or an N-type well formed under the active gate; and

a transistor gate oxide layer formed between the active gate and the P-type or the N-type well.

8. The apparatus of claim **1** comprising a semiconductor device comprising a transistor gate oxide layer formed between each field gate of the at least one field gate and each drain active strip of the at least one drain active strip.

9. The apparatus of claim **1**, wherein each of the at least one field gate has a different voltage determined based on a first voltage at the active gate and a second voltage at the drain.

10. The apparatus of claim **1**, further comprising:

a capacitor having a first end coupled to the active gate or a source and a second end coupled to one of the at least one field gate.

11. The apparatus of claim **1**, wherein the active gate controls a field effect transistor (FET), and the at least one field gate controls a metal oxide semiconductor (MOS) varactor (VAR).

12. The apparatus of claim **1** comprising a semiconductor device comprising an N-channel metal oxide semiconductor (NMOS) transistor comprising the active gate, the NMOS transistor having an N-type source and the drain comprising an N-type drain.

13. The apparatus of claim **1** comprising a semiconductor device comprising a P-channel metal oxide semiconductor (PMOS) transistor comprising the active gate, the PMOS transistor having a P-type source and the drain comprising a P-type drain.

14. The apparatus of claim **1** fabricated over a buried oxide layer with a silicon-on-insulator (SOI) integrated circuit (IC) process.

15. The apparatus of claim **1** fabricated with a bulk complementary metal oxide semiconductor (CMOS) integrated circuit (IC) process.

16. The apparatus of claim **1**, further comprising:

an active circuit comprising a semiconductor device having the at least one field gate, the at least one STI strip, and the at least one drain active strip.

17. The apparatus of claim **16**, wherein the active circuit comprises a power amplifier.

18. The apparatus of claim **1** comprising an integrated circuit (IC).

19. A method comprising:

forming at least one field gate between an active gate and a drain;

forming at least one shallow trench isolation (STI) strip transverse to the at least one field gate and extending across the at least one field gate and to the drain; and

forming at least one drain active strip parallel to, and alternating with, the at least one STI strip.

20. The method of claim **19**, further comprising:

forming a buried oxide layer over which a source, the drain, the at least one STI strip, and the at least one drain active strip are formed.

21. The method of claim **19**, further comprising:

forming a P-type well over which a source and the active gate are formed; and

forming an N-type well over which the drain, the at least one field gate, the at least one STI strip, and the at least one drain active strip are formed.

22. The method of claim **19**, further comprising:

forming an N-type well over which a source and the active gate are formed; and

forming a P-type well over which the drain, the at least one field gate, the at least one STI strip, and the at least one drain active strip are formed.

23. An apparatus comprising:

means for forming at least one field gate between an active gate and a drain;

means for forming at least one shallow trench isolation (STI) strip transverse to the at least one field gate and extending across the at least one field gate and to the drain; and

means for forming at least one drain active strip parallel to, and alternating with, the at least one STI strip.

24. The apparatus of claim **23**, further comprising:

means for forming a buried oxide layer over which a source, the drain, the at least one STI strip, and the at least one drain active strip are formed.

25. The apparatus of claim **23**, further comprising:

means for forming a P-type well over which a source and the active gate are formed; and

means for forming an N-type well over which the drain, the at least one field gate, the at least one STI strip, and the at least one drain active strip are formed.

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